Waste Audit DIY Guide

Understanding your waste stream profile will help you understand your consumption patterns as well as identify ways to reduce waste, increase recycling and save money. Business or commercial waste streams can vary greatly depending on the type of business, size of the business, office or facility space, and the services or products provided. Waste reduction strategies can vary just as much from simple onsite minimization and recycling initiatives, to procurement practices, operational changes and Zero Waste policies, and even to supply chain and vendor requirements. Use what you learn through a simple waste audit to put together a plan to continually assess and reduce the amount of waste churned out by your business.

The purpose of this guide is to outline some simple starting steps to help you assess your waste stream, including waste generation patterns and composition, and identify strategies for reducing, reusing and recycling. Many methods exist for conducting a waste audit, which vary in intensity, labor and time required, measurement strategies and waste reduction goals. See EPA's 3 Ways To Do A Waste Audit (also listed in the Help Tab of the Scorecard) to explore some of these suggested methods and/or use the steps below to get you started.

NOTE: Many common yet non-recyclable items have a more environmental alternative. For example, coffee cups and beverage cartons coated with a thin plastic resin on the inside (called tetrapack) are not recyclable in most places, regardless of the recycling symbol often placed on the bottom on these containers. Alternatively, use plastic beverage containers that are recyclable and can be kept out of the landfill. Similarly, plant-based biodegradable coffee cups as well as disposable plates utensils and to-go containers can be composted with the proper set-up and avoid adding mass to your garbage pile.

Step 1: Take stock of your waste. Conduct a walk through of your building to see where waste is generated and where it is disposed of. For a typical office, the majority of waste will most likely be generated at employee's desks, print stations or service desks, and/or in a break room or kitchen area. Retailers may find most waste comes from inventory and packages, as well as the store office. Restaurants and food service businesses face a very different waste stream, likely including much more organic waste as well as disposable cooking and service ware. Using members of your Green Team, compile a simple list of waste stream materials (What), where it is pitched (Where) and how it is disposed of (How). See the example below for a basic layout of a waste chart. This chart could be more detailed to include disposal sites, estimated quantity or volume of waste materials, and a column to track reduction or recycling efforts.

Example: The Sustainability Institute, 113 Calhoun Street Office

Waste Material (What)	Source (Where)	Disposal (How)
printing paper	printing station, office	recycled
newsprint	mail, weekly newspapers	recycled
magazines and catalogues	mail	recycled
paperboard packaging	office supplies and packages	recycled
cardboard boxes	office supplies and packages	recycled
food waste	employee lunches, guest events	garbage
plastic bottles and containers	office supply packaging, employee lunches, guest events	recycled
paper drinking cups (with resin)	coffee cups, employee lunch and guest events	garbage
styrofoam cups	employee lunch	garbage
plastic sheeting (packaging)	office supply and packages	garbage
soda cans	employee lunch and guest events	recycled
misc plastics	office supplies and packages	garbage
printer ink cartiridges	printing station, office	recycled
electronics	general office	recycled

Step 2: Assess the volume of garbage and recycled materials. If the majority of your waste stream is recycled, then you are on a roll – Keep it up! If you put out a lot of garbage at the end of each day or week, look for ways to reduce. Assess what is in your waste stream that could be recycled instead of trashed, replaced by a durable multiuse option instead of used once, replaced by a recyclable option, or eliminated altogether. Below is a simple chart used to track disposal at The Sustainability Institute's 113 Calhoun St. office.

Example: 113 Calhoun Street Office

Date	**Recyclables: 22 gallon bin** (County issues recycling bin picked-up curbside twice monthly)	**Garbage: 96 gallon roll cart** (City issued roll cart picked-up curbside weekly)	**Total Cost**
5/01/2010 - 5/30/2010	3.5	1	$0
6/01/2010 - 6/30/2010	2	1.5	$0
7/01/2010 - 7/30/2010	3	0.75	$0

For companies that use a dumpster, record dumpster volume and frequency of pick up. If the dumpster is not full when picked-up, estimate volume as a portion of the whole (e.g. 3/4 of a 12 yard dumpster). If you share a dumpster facility with other businesses, consider tracking bags of trash. The important thing is to capture some estimate of volume to better track reduction measures.

Over time, as you identify and implement recycling and reduction strategies, consider the possibility of reducing container size and/or frequency of pick-ups. This will cut down on the costs of waste disposal.

Step 3: Set up conveniently located and marked recycling and waste receptacles to encourage recycling, proper disposal and separation. Tip: Some simple signage can go a long way.

Step 4: Using the information you learned through the auditing process - how much waste is being generated, where it is coming from, and what kinds of waste are being generated - develop a set of waste reduction initiatives and a plan to implement those initiatives over time. Consider repeating the audit every 6 months to a year to continually assess your waste stream profile, generation and disposal patterns, and identify new ways to cut waste and increase recycling.

5 Reasons to Recycle:

1) Recycling reduces or eliminates pollution by reducing the need to extract, move and process raw materials. In the United States processing minerals contributes almost half of all reported toxic emissions from industry sending 1.5 million tons of pollution into the air and water each year.
2) Recycling reduces the need to build landfills and incinerators. Similarly, recycling helps businesses, other organizations and communities avoid disposal costs associated with landfills and incinerators.
3) Recycling saves natural resources. When one ton of steel is recycled, for example, 2,500 pounds of iron ore, 1,400 pounds of coal and 120 pounds of limestone are conserved. Recycled paper supplies more than 37 percent of the raw materials used to make new paper products in the U.S. Without recycling, this material would come from trees.
4) Recycling reduces greenhouse gas emissions by (1) decreasing the energy needed to make products from virgin materials and thereby reducing the burning of fossil fuels (2) reducing emissions from landfills and incinerators, which are major sources of methane and carbon dioxide gas emissions and (3) slowing the harvest of trees thereby maintaining the carbon dioxide storage benefit provided by trees. A national recycling rate of 30 percent reduces greenhouse gas emissions as much as removing nearly 25 million passenger cars from the road for one year.
5) Recycling stimulates the development of green technology. Recycling allows for and encourages the development of more environmentally friendly products. The vast supply of low-cost recyclables from local collection programs has spurred many businesses to develop cutting-edge technologies and products. Waste tires, for example, are used in many applications including rubberized asphalt for paving roads. In fact, through the work of the Asphalt Rubber Technology Service housed at Clemson University, South Carolina has become a national leader in developing this technology .